



ABS Education Services

CaSQ 28

Date: \_\_\_\_\_

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Name: \_\_\_\_\_

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## Parallel Box and Whisker Plots of Hours Slept

### How to Get a Random Sample from CensusAtSchool

Go to the CensusAtSchool [Random Sampler](#) to download a sample.X

**Reference year:** (select year) **Sample size:** At least 50 students

**Select questions:** Hours slept on a school night

**Location:** Select location

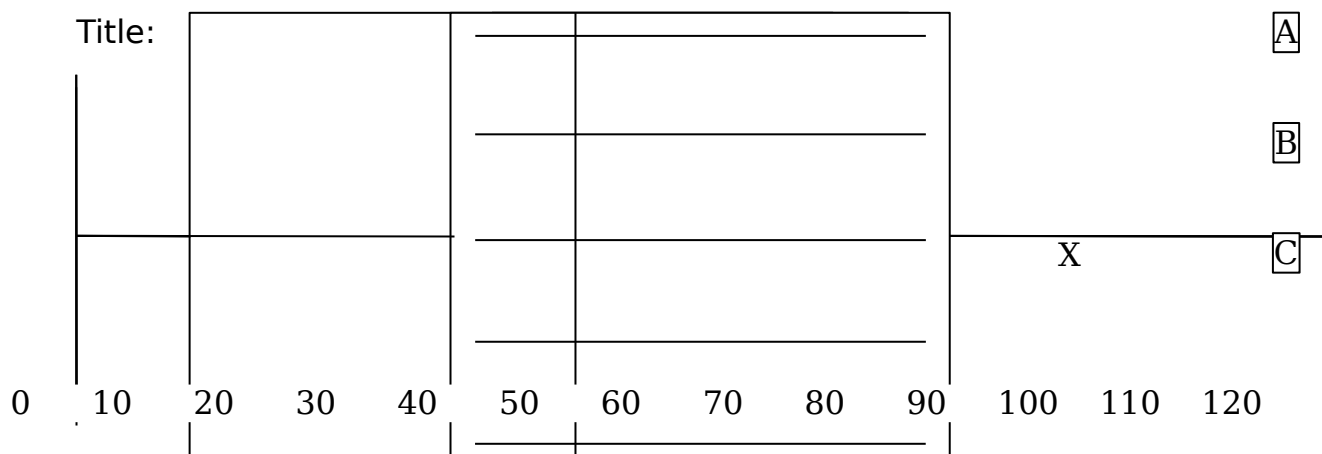
**Year level:** (select a range of year levels)

To protect privacy there is a rule built into the sampler that the requested sample size cannot exceed 10% entered.

### Task:

#### Parallel Box and Whisker Plots

Parallel box and whisker plots are used to compare the numerical results taken from two or more groups. They are called parallel because they are placed one above the other using only one number line.



1. What could the box and whisker plots A, B and C represent?

2. Give the plot a title. \_\_\_\_\_



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- 3.** Write eight True or False statements that could be answered from this diagram, make sure you cover: range, IQR, median, outliers, symmetry/skew in your statements.

### Using the Random Sample for Sex and Hours of Sleep

- 4.** From the random sample, select the data relating to sex and number of hours slept on a school night. Set up parallel box and whisker plots to investigate whether there are differences between the number of hours slept by males and by females. Write four sentences about what you found, commenting on similarities as well as differences.